

ON SOME AMERICAN PYRRHOCORIDAE
[HEMIPTERA].

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Euryophthalmus priscillae n. sp.

Largus humilis [nec Drury], Bueno, 1914, Anal. Mus. Nac. Buenos Aires, xxvi, p. 159.

Blackish or dark cinnamomeus; pronotal collar and lateral margins anteriorly, narrow basal margin of pronotum, a broad fascia on the hemelytra as wide as the claval commissure, extended anteriorly somewhat on the exocorium but not reaching its base, and a second narrower fascia just before the apical angle, sometimes more or less interrupted at its middle, extreme tip of scutellum, posterior half of each connexival segment, apical portion of last dorsal segment (δ), posterior margin of metapleura, first ventral segment entirely (as far as visible) a triangular spot at the posterior lateral angles and a narrow fascia on the posterior margin (not reaching the lateral margin) of segments 2 to 6 of the venter, yellow. Anterior lobe of pronotum black, posterior lobe paler, darkened toward the sides, coarsely but rather closely punctate; posterior portion of propleurae testaceous, with a few black punctures. Legs and antennae piceous-black; base of first antennal segment, coxae, trochanters, and base of all femora, testaceous. Membrane sordid gray, with an obsolete pale spot at base as if continuing the subapical yellow fascia of the corium; veins black, coarsely and irregularly reticulate. Hemelytra reaching middle of last dorsal segment (δ); exocorium with extremely fine concolorous punctures; mesocorium and clavus with a few coarse punctures at base, the latter also with a few punctures next the commissural margin. Head with eyes about as wide as anterior pronotal lobe; pronotum $2/5$ wider than long as seen from above, the lateral margins distinctly sinuate. First antennal segment $1/10$ shorter than pronotum; ratios of antennal segments, 9:5:3:8. Rostrum reaching middle coxae. Length $10\frac{1}{2}$ mm.; width across base of pronotum 4 mm.; maximum width, across apex of clavus, $4\frac{1}{2}$ mm.

ARGENTINA: Chaco de Santiago del Estero, Rio Salado. Type in Bueno's collection.

Very near *E. fasciatus* (Blanchard), differing by its shorter stature and somewhat broader form, the much more thickly punctate pronotum, the reticulately veined membrane, the abdominal segments all narrowly margined behind with yellow.

Euryophthalmus balteatus var. **thoracicus** n. var.

Structurally indistinguishable from *E. balteatus* (Stål), but with the posterior lobe of the pronotum pale whitish yellow.

BRAZIL: Matto Grosso, Corumbá, February. Type in H. H. Smith Collection, American Museum of Natural History.

The Smith collection also contains two specimens of typical *balteatus* from this same locality; and I have one specimen labelled "Peru," obtained from Staudinger & Bang-Haas. This species has hitherto been reported only from Bolivia. I am not at all sure that it can be maintained as distinct from the common *E. humilis* (Drury), of which I suspect it to be merely a well-marked color form.

Largulus n. gen.

Oblong, parallel. Head somewhat oblique, shorter than its width with the eyes, gula not sulcate, bucculae low, not or scarcely extended backward as far as the antenniferous tubercles; eyes very slightly stylate; vertex flat or very slightly convex; rostrum reaching the metasternum, the first segment reaching almost to base of head, first three segments subequal, fourth shortest; antennae rather slender, about as long as the pronotum and corium together, first segment longer than the width of the head, lightly curved, slightly thickened toward the apex, fourth segment longer than the first, third shortest. Pronotum about one-third wider than long, narrowed anteriorly; disc of anterior lobe scarcely (♀) or lightly (♂) convexly elevated; posterior lobe (except the lateral margins) distinctly punctate, anterior lobe smooth except for a few punctures on the depressed anterior margin and a few obsolete points on the lateral margins; lateral margins narrowly but distinctly carinate, not at all reflexed, the carina extended anteriorly to the collar-like depressed anterior margin. Scutellum subequilateral, transversely depressed at base, the lateral margin scarcely sinuate. Hemelytra complete; costal margin of corium most lightly ampliate (♀) or straight (♂), apical margin straight, equal in length to the claval suture, apical angle subacute. Anterior coxae unarmed; anterior femora with subapical spinules. Odoriferous orifices not auriculate. Abdomen parallel (♂) or very slightly wider at the middle (♀), scarcely wider than the hemelytra; incisures between segments 3-4 and 4-5 lightly curved anteriorly near the lateral margins but transverse at the margins themselves. Glandular spots on segments 4 and 5 arranged as in *Euryophthalmus*. Sixth ventral segment of female divided.

Type: *L. parallelus* n. sp.

Closely allied to *Euryophthalmus* Lap., differing by its more slender form, its non-ampliate hemelytra, its carinate pronotal margins, its more slender antennae, and its apical corial margin as long as the claval suture.

Largulus parallelus n. sp.

Honey yellow (sometimes crimson); head, an irregular spot on each pronotal callosity, base of scutellum each side of median line, and hemelytra (except costal margin, apical angle, and narrow apical margin, and base and apex of cubital vein on corium, and inner and commissural margins of clavus), black. Beneath black, abdomen somewhat bronzy. Head, sternum, and pleura with pale sericeous pubescence, pronotum anteriorly with several remote black setulae. Head wider than long; antennae testaceous, the first three segments lightly infuscated toward their apices, fourth segment piceous, its base sometimes pale, first segment $\frac{1}{4}$ longer than width of head, and $\frac{1}{5}$ longer than pronotum, ratios of segments, 15:10:7:16. Rostrum testaceous, the basal segment piceous, apex attaining middle of metasternum. Pronotum with the lateral margins lightly sinuate; posterior lobe and scutellum remotely punctate with black. Hemelytra reaching apex of abdomen; veins of membrane not anastomosing. Legs testaceous; anterior femora with a large and one or two smaller subapical spines. Length, ♂ 7, ♀ 8 mm.; humeral width, ♂ 2, ♀ $2\frac{1}{2}$ mm.

JAMAICA: Cinchona, 5,000 feet, Jan., 1912 (C. T. Brues). Type, allotype, and paratypes in my collection. Also three paratypes from the same locality, Feb. 25-26, 1911, in American Museum of Natural History. All of these specimens pertain to the yellow form of the species.

Mr. Barber has shown me a single specimen, also from Cinchona, collected in July, 1923, in which the honey yellow of the typical form is replaced by a deep crimson. Otherwise this one individual shows no significant variation from the type. It may be that this red phase is a seasonal variant, but the material at hand is much too scanty to determine its status exactly.

Theraneis isobel n. sp.

Black, somewhat shining; corium and clavus gamboge yellow, the latter and the exocorium obsoletely concolorously punctate, endocorium with a row of distinct punctures next the claval suture, mesocorium smooth, costal margin most

lightly sinuate; membrane dull black, apical margin narrowly, basal margin more broadly, bordered with white. Antennae testaceous, basal joint (except the apex) and extreme apex of the fourth, black; ratio of segments 26:15:12:26, length of second segment equal to interocular distance. Rostrum reaching base of mesosternum. Head formed as in *T. pulchra* Dist., its width with the eyes 1.6 mm., interocular breadth 0.8 mm.; sides of head anteriorly with sparse silvery pile.

Pronotum 2.0 mm. long, humeral width 2.2 mm., anterior width 1.2 mm., the two lobes about equally long, the interlobular sulcus rather broad, lightly curved, filled with minute silvery pile, the posterior lobe with an abbreviated median line of silver pile, extending from the sulcus backward about to the middle of the lobe; pronotum (except the callosities) covered with minute matted black pubescence; pronotal collar and posterior lobe distinctly punctate. Scutellum about 1/5 longer than wide, dull black, the apex testaceous, distinctly punctate. Beneath black, shining; sterna, and pleura less densely, silvery pilose. Posterior margins of ventral segments with a narrow band of silvery pile, interrupted at the median line; the segments laterally with a few remote erect black hairs; female genital segment, as also the middle and hind tibiae and the clavate portion of the posterior femora, with remote erect pilosity.

Length (♀) 9 mm., maximum width $2\frac{1}{4}$ mm.

HONDURAS: Tela, Guaimas District, 5:V:1923 (T. H. Hubbell). Type in Museum of Zoology, University of Michigan.

Very near *T. pulchra* Dist., but broader, more strongly shining, the femora a little more strongly clavate, the corium and clavus yellow, and the silvery pile otherwise distributed.

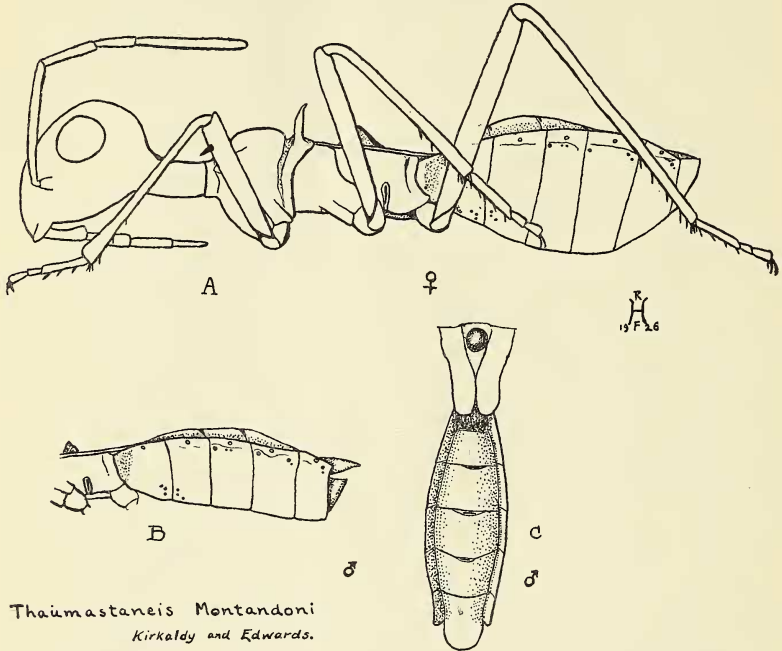
Genus *Thaumastaneis* Kirk. & Edw.

In their original characterization (1902, Wien. Ent. Zeit., xxi, p. 164, pl. III, figs. 4, 4a), Kirkaldy and Edwards compared this genus to *Theraneis*, but the two genera really have little in common. As a matter of fact, *Thaumastaneis* is most nearly related to *Arhapha* and *Japetus*, differing from them by the long slender neck-like base of the head, the shorter rostrum, the broad deep impression between the pronotal lobes, the large pre-humeral spine of the posterior lobe, the strongly brachypterous condition, etc. Inasmuch as the original description is so incomplete, omitting several important characters such as the form of the bucculae, the structure of the odoriferous orifices, the scutellar

tubercle, *et al.*, I have thought it best to give a more complete account of the generic characters. This I have supplemented with outline drawings of the type species, as the original figures are inaccurate in many respects: lithographic work in color, even in the hands of so competent an artist as Horace Knight, does not lend itself well to the representation of structural details.

Head obliquely declivous beyond the slender cylindrical neck, transversely convex above and below, almost quadrate anteriorly as seen from above (fig. 4 of Kirkaldy & Edwards represents the head as too long), but as seen from in front, much narrowed and shortly triangularly produced in front of the antennal insertion. Bucculae much higher than long, angularly rounded at apex, posterior margin somewhat oblique. Gula not sulcate. Rostrum hardly passing base of head, first joint slightly the longest, second and third subequal, fourth slightly the shortest. Antennae moderately thick, the segments only lightly narrowed toward the base, first joint slightly longer than fourth, third much the shortest. Eyes very prominent, hemispherical, extremely short-stylated. "Neck" inserted at middle of vertical depth of head. Pronotum not one-half longer than deep, divided into two lobes by a broad deep sulcus; anterior lobe three times as long as posterior, glabrous, impunctate, shining, convexly declivous anteriorly to the distinct pronotal collar, which continues onto the ventral side of the thorax, though somewhat narrowed at the sides; interlobar sulcus and posterior lobe with a few coarse punctures. Lateral margins of posterior lobe just before the humeral angles with a long erect conical spine, directed slightly outward and backward, sometimes slightly curved in its apical third. Basal margin of pronotum broadly shallowly sinuate. Scutellum twice as long as broad, its disc with a blunt conical tubercle simulating the petiolar node of an ant. (This tubercle is much larger in the nymph than in the adult.) Hemelytra rudimentary, about twice as long as the scutellum. Head, pronotum, neck, hemelytra, abdomen (sparsely), and all femora with rather remote erect hairs. Anterior femora with a small tooth beneath near apex; first joint of posterior tarsi one-half longer than second and third together. Metasternal orifices transverse, their apices somewhat elevated from the pleuron, not at all auriculate. Abdomen fusiform (♀) or oblong-ovate (♂), strongly convex below, less convex above, extremely shallow at base, the first dorsal segment deeply depressed below the level of the second; first visible ventral segment strongly impressed at each side, leaving the basal half of the segment somewhat carinate

on the mid-ventral line. Genital segments (δ , ♀) and sixth ventral segment (♀) constructed on the same plan as in Myodochine Lygaeidae.



Thaumastaneis Montandoni
Kirkaldy and Edwards.

Figure 1. *Thaumastaneis montandoni* Kirk. & Edw. A, Female, lateral aspect. B, Metathorax and abdomen of male, lateral aspect. C, Scutellum, hemelytra, and abdomen of male, dorsal aspect.

Thaumastaneis Montandoni Kirk. & Edw. (Fig. 1.) δ : Brachypterous, similar to the female, the abdomen less narrowed apically; last dorsal abdominal segment projecting by $\frac{1}{3}$ of its own length beyond apex of connexivum. Length 9 mm., maximum width (across eyes) $2\frac{1}{2}$ mm.

This species was described from a single female taken at Játaby in the extreme southern part of the state of Goyaz, and at that time the authors surmised that the male was "wahrscheinlich geflügelt." This surmise, however, is now found to be incorrect. I have before me one male, two females, and one fifth-instar nymph of the species, forming part of the H. H. Smith collection in the American Museum of Natural History. These bear the label

"Chapada"; and, if I am correct in assuming that this refers to the Chapada in the state of Maranhão, then the known range of the species is extended about one thousand miles to the north from the type locality.

Dysdercus bidentatus n. sp.

D. concinnus [partim] Distant, 1883, Biol. Centr. Amer., Rhynch. Het., i, p. 231, Tab. XXI, fig. 11.

Head reddish, not at all shining; tylus, especially toward the apex, piceous; vertex with a large black spot which usually has the form of an inverted trapezoid; length 1.6-1.7 mm., width 1.8-2.1 (average 2.0 mm.), interocular width 1.2 mm.; ratios of antennal segments (average) 10:8:5:15½, second segment subequal to or very little longer than width of head; antennae black, base of first segment testaceous; head beneath testaceous; rostrum reaching the middle of third ventral segment, black, the basal half of the first joint and the incisures flavo-testaceous.

Pronotum with the lateral margins more distinctly reflexed and a little wider than in *D. concinnus* (especially next the callosities), and the lateral margin commonly much more deeply sinuate; length of pronotum 2.0-2.3 mm. (average 2.2), humeral breadth, ♂ 3.2-3.6, ♀ 3.8-4.1 mm. (average 3.6 mm.), posterior lobe twice as long as anterior, the callosities and the collar about equally long on the median line; collar and posterior lobe (except the reflexed lateral margin) black, the extreme anterior margin of the former narrowly pale; callosities reddish ochraceous; lateral margins testaceous, more or less darkened anteriorly. Scutellum black, the extreme apex ochraceous.

Corium and clavus ochraceous, sometimes almost white, the former with the extreme apical angle black and with a large subfasciate postmedian black spot, more or less rounded internally, this spot with its anterior margin almost transverse laterad of the cubital vein; membrane black, the apical margin white, this white border not extended anteriorly to apex of corium.

Beneath testaceous, sometimes rufo-testaceous; propleura ochraceous; all acetabula reddish, those of the meso- and metathorax bordered with, or sometimes entirely, black. Venter testaceous, becoming reddish on apical segments; all segments with their anterior margins black, these black markings broadest on the 5th and 6th segments; often showing a tendency to break up into a series of almost linear transverse markings at each side and a series of triangular or subquadrate spots on the midventral line.

Male genital segment (Fig. 2) oblique as seen from the side, the genitalia exposed in all the males that I have seen; apical margin of the genital segment with two distinct spinose teeth, rather remote from one another, one on either side of the median line; genital claspers very distinctive of the species.

Length, 11.5–14.8 mm. (average, ♂ 12.3, ♀ 13.7); maximum width across hemelytra 3.9–5.2 (average, ♂ 4.2, ♀ 4.8).

Holotype: ♂. PANAMA: Volcan de Chiriqui, 2–3,000 ft. (Champion), in Museum of Comparative Zoology.

Allotype: ♀. PANAMA: Canal Zone, Barro Colorado, 12: XI: 1923, in American Museum of Natural History.

Paratypes: ♂♂ and ♀♀. PANAMA: same date as allotype. COSTA RICA: Pacayas (C. Werckele). HONDURAS: Progreso, 19: III: 1923 (T. H. Hubbell); Tela, Guaimas District, 17: III: 1923 (Hubbell). In American Museum of Natural History, Museum of Zoology of the University of Michigan, and my collection.

Distant's remarks (*loc. cit.*) anent the variability of *D. concinnus* were due, in part, to the fact that his series of specimens included the present species as well; the holotype described above is from the "Biologia" material and bears the label "*Dysdercus concinnus*," while Distant's Fig. 11, as indicated above, certainly represents *D. bidentatus*. Mr. China informs me, however, that the British Museum collection now contains no specimens of this species.

Apart from the very distinctive male genitalia, *D. bidentatus* differs from *concinnus* in the coloration of the venter, the longer rostrum, the longer fourth antennal segment which averages $\frac{1}{2}$ longer than the first ($\frac{1}{5}$ longer in *D. concinnus*), and the form of the black spot on the corium: this last difference is clearly shown in Figs. 11 and 12 in the "Biologia." The bicolored head also seems characteristic, as I have seen no specimens of *concinnus* in which the head is not unicolorous, either red or black.

The antennal characters must be used with caution, however, in separating these two species. While the *average* ratios of segment IV to segment I are quite distinct, yet the range of variation is such that, with a longer series of specimens, I should not be surprised to find the two to overlap. Thus, in the series of *D. bidentatus* before me, this ratio ranges from 1.36 to 1.60, the females averaging a little higher than the males, and in sixteen specimens of *D. concinnus* it varies from 1.08 to 1.31.

Dysdercus albidiventris Stål.—This species appears to be the most variable of all the continental American species of the genus. All the various color phases, however, can definitely be allocated to *albidiventris*, because of the agreement which they exhibit in the male genital claspers. These are very distinctive (Fig. 2), and are infallibly diagnostic of this species.

At one extreme is an apparently rare melanistic color variety of which I have seen two specimens from Pacayas, Costa Rica. These present a dorsal picture very similar to that of *D. bidentatus*, while the ventral coloration is like that of a *D. concinnus* in which the red is more or less replaced by black. From those two species, however, this form is readily separated by its smaller size, narrower pronotum, and longer head, as well as by the genital claspers. Mr. Barber agrees with me in identifying this form with *D. splendidus* Distant, which thus sinks as a synonym of *D. albidiventris*.

The other extreme is found in a pale form which has often been misidentified as *D. ruficollis* (Linn.), but which is readily separable from all the complex of species to which the true *ruficollis* belongs by having the fourth antennal segment concolorous at the base. I have seen this form of *albidiventris* in collections from Honduras, Panama, Colombia, and Ecuador; and I seriously doubt the occurrence of *ruficollis* in Central America, north of Panama at least. The "*ruficollis*" of Distant (*Biol. Centr. Amer., Rhynch. Het.*, i, p. 233, tab. XXI, figs. 20, 21) is certainly *albidiventris*.

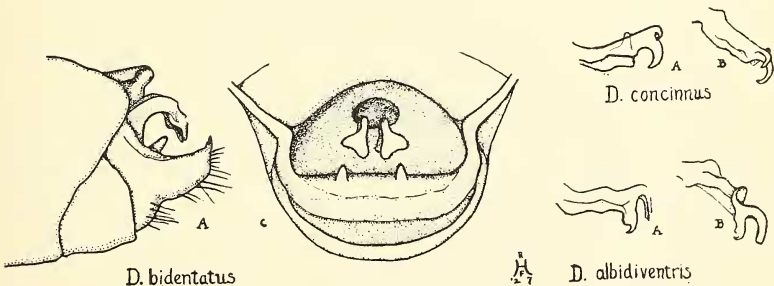


Figure 2. Genitalia of *Dysdercus*. A, lateral aspect. B, dorsal aspect. C, postero-dorsal aspect.